

REMARKS

The Office Action dated November 23, 2004 has been received and carefully considered. In this response, claim 40 has been amended to correct its dependency. Reconsideration of the outstanding rejections is respectfully requested in view of the following remarks.

Withdrawal of Finality of Office Action

The Applicant notes with appreciation the withdrawal of the finality of the previous Office Action, as well as the withdrawal of the previous rejections of the pending claims.

Anticipation Rejection of Claims 1-4, 6, 28 and 41-43

At page 3 of the Office Action, claims 1-4, 6, 28 and 41-43 were rejected under 35 U.S.C. Section 102(e) as being anticipated by Endo (U.S. Patent No. 6,615,303). This rejection is respectfully traversed.

Claim 1, from which claims 2-4, 6, 28 and 41-43 depend, recites the limitations of providing a plurality of operating systems on a single information handling device having one or more appliances, the plurality of operating systems including *an appliance operating system dedicated to control the information handling device to operate a subset of the one or more appliances*, and a general operating system to perform general information handling tasks. With respect to these limitations, the Examiner asserts that the passages of Endo at col. 20, lines 31-36 and col. 11, lines 57-67 disclose the limitations of an information handling device having one or more appliances and further asserts that the passages of Endo at col. 12, lines 1-28 and col. 9, lines 46-67 disclose the limitations of an appliance operating system dedicated to control the information handling device to operate a subset of the one or more appliances. *Office Action*, p. 3. For ease of reference the relied-upon passages of Endo are provided below:

The particular embodiment of the graphic display system, to which the present invention has been discussed hereinabove, *various peripheral devices, such as serial/network communication, CD-ROM/DVD-ROM storage device, can-be made common for a plurality of operating systems by application of the present invention.*

Endo, col. 20, lines 31-36 (emphasis added).

As set forth above, the method for using the input and output device in common for a plurality of operating systems by making reference to the preferential interrupt table 156 provided in the inter-OS control function 124, and actuating the interrupt handler after determination of the operating system to be operated. However, it is possible to occur the case where the operating systems cannot be uniformly determined from the interrupt number for some input and output device.

Endo, col. 11, lines 57-65.

For example, in an input and output panel of a vehicle mounted navigation system shown in FIG. 11, for example, a switch 105 for inputting a command by the user and a display 104 for displaying a result are provided. The switch 105 preferably includes *a dedicated switch 190 for real time OS, which is used by only tasks provided in the real time OS 117, a dedicated switch 191 for office work and a common switch 192 which can be used in common from the tasks provided in both of the operating systems. By providing the dedicated switches per operating system, frequently used function can be fixedly assigned to the switches to attain a feature to improve operability.* Furthermore, by assigning the function to the fixed switch, function name can be displayed on the button to improve identifiability. However, providing distinct interrupt number per switch is disadvantageous in viewpoint of constraint of number of interrupt signal lines and simplification of the hardware. On the other hand, by assigning the same interrupt number to the switches, it becomes impossible to determine which interrupt handlers of the operating systems is to be actuated upon depression of the switch. In order to solve this problem, a switch table 200 is provided in the common memory 125 provided in the inter-OS control function 124. In the switch table, information of the switch to be used by which operating system is stored per switch in FIG. 12, in the switch table, "real time OS", "general purpose OS" and "common" are stored. Of course, storing the character string in the table is quite inefficient, the information may be stored in a form of integer, such as if the operating system is real time OS, 0 is stored, if the general purpose OS, 1 is stored, and if common, 2 is stored.

Endo, col. 11, line 65 – col. 12, line 28 (emphasis added).

The Applicant respectfully submits that none of the above relied-upon passages of *Endo* provide any support for the Examiner's assertion that *Endo* discloses an appliance operating system dedicated to control the information handling device to operate a subset of one or more appliances of the information handling system as recited by claim 1. The relied-upon passage of *Endo* at col. 20, lines 31-36 provides that "various peripheral devices can-be [sic] made common for a plurality of operating systems by application of the present invention." This passage therefore merely teaches that the plurality of operating systems of the system of *Endo* may share

various peripheral devices. Similarly, the relied-upon passage of Endo at col. 11, lines 57-67 provides “the method for using the input and output device in common for a plurality of operating systems,” and therefore merely teaches that an input and output device may be used in common by a plurality of operating system. It therefore is respectfully submitted that neither of these passages support for an appliance operating system dedicated to control an information handling device to operate a subset of the one or more appliances of the information handling system as recited by claim 1.

Turning to the relied-upon passage of Endo at col. 11, line 65-col. 12, line 28, the only similarities between the disclosure of this passage and the limitations of claim 1 is that they both make use of the term “dedicated,” but this is where the similarities end. Endo uses the term “dedicated” in reference to “dedicated switch 190” and “dedicated switch 191” and teaches that the significance of these dedicated switches is that “[b]y providing the dedicated switches per operating system, frequently used function[s] can be fixedly assigned to the switches to attain a feature to improve operability”. *Endo*, col. 12, lines 7-9. Thus, Endo teaches that the dedicated switches 190 and 191 are “dedicated” to a real time OS 117 and an “office work” OS, respectively. *Id.*, col. 12, lines 2-7. This relied-upon passage makes no mention of a “dedicated” operating system, much less an appliance operating system dedicated to control an information handling device to operate a subset of the one or more appliances of the information handling device as recited by claim 1.

As established above, the Office Action fails to demonstrate that Endo discloses or suggests at least the limitations of an appliance operating system dedicated to control an information handling device to operate a subset of the one or more appliances of the information handling system recited by claim 1. The Office Action therefore fails to establish that Endo discloses or suggests each and every limitation of claim 1, as well as each and every limitation of claims 2-4, 6, 28 and 41-43 at least by virtue of their dependency on claim 1. Moreover, these claims recite additional limitations neither disclosed nor suggested by Endo.

In view of the foregoing, it is respectfully submitted that the anticipation rejection of claim 1-4, 6, 28 and 41-43 is improper at this time and withdrawal of this rejection therefore is respectfully requested.

Obviousness Rejection of Claims 5, 7-27, 29-40 and 44-46

At page 5 of the Office Action, claims 5, 7-27, 29-40 and 44-46 were rejected under 35 U.S.C. Section 103(a) as being unpatentable over Endo in view of “Official Notice.” This rejection is respectfully traversed.

Claim 1, from which claims 5 and 29-40 depend, recites the limitations of an appliance operating system dedicated to control an information handling device to operate a subset of the one or more appliances of the information handling device. Claim 7, from which claims 8-17 depend, claim 18, from which claims 19-25 depend, and claim 26, from which claims 27 and 28 depend, recite the same or similar limitations. As noted above, Endo fails to disclose or suggest at least these limitations. The Office Action does not provide any “Official Notice” with respect to these limitations. Accordingly, the Office Action fails to establish that the proposed combination of Endo and the purported “Official Notices” discloses or suggests each and every limitation of claims 1, 7, 18 and 26, as well as claims 5, 8-17, 19-25 and 27-40 at least by virtue of their dependency from one of claims 1, 7, 18 or 26.

In addition to failing to establish that the claims 5, 8-17, 19-25 and 27-40 are obvious based on their dependency from independent claims that are non-obvious in view of Endo, these dependent claims recite additional limitations neither disclosed nor suggested by Endo. For example, claims 5 and 40 recite the additional limitations of wherein executing the appliance operating system includes reading the appliance operating system from a non-volatile memory circuit and executing the general operating system includes reading the general operating system from a mass storage device. Claim 9 recites the similar limitations of wherein the general operating system is store in a mass storage medium and the appliance operating system is stored in a read-only memory circuit. With respect to these limitations, the Examiner admits that they are not disclosed by Endo, so the Examiner instead provides “Official Notice” that “both the concept and advantages of providing the use of non-volatile/read-only memory are well known and expected in the art.” *Office Action*, p. 5. As for the purportedly well known and expected “concept and advantages” of providing the use of non-volatile/read-only memory, the Examiner asserts that “the well-known use of non-volatile/read-only memory would retain the appliance operating system even when the system is powered off. The system having the appliance

operating system would get the benefit of a non-volatile/read-only memory for storing the appliance operating system.” *Office Action*, p. 6. The Applicant respectfully disagrees and submits that the Examiner’s assertion that the use of non-volatile/read-only memory circuit as described in the context of the claims is “is not capable of instant and unquestionable demonstration as being well known.” *See M.P.E.P.* Section 2144.03. Accordingly, the Applicant respectfully requests that the Examiner cite such a prior-art reference serving as evidentiary support of the Examiner’s position in the event that the Examiner continues to reject claims 5 and 40 in view of Endo as the production of such a prior-art reference should not unduly burden the Patent Office if the use of non-volatile/read-only memory circuit as discussed above is well known as suggested by the Examiner. *See Id.*, Section 2144.03(C).

Additionally, regardless of whether the Examiner’s characterization of the use of non-volatile memory to store an appliance operating system as well known is accurate, the Applicant respectfully submits that the Examiner’s Official Notice addresses only one component of the additional subject matter of claims 5 and 40. As will be appreciated, claims 5 and 40 recite the limitations that the appliance system is obtained from non-volatile memory whereas the general operating system is obtained from a mass storage device. The Examiner has failed to establish or even address that storing two different operating systems in different data storage types, *i.e.*, a non-volatile memory circuit and a mass storage device, in an information handling system is known, let alone obvious. Thus, even if it is assumed, *arguendo*, that is well-known to use a non-volatile memory circuit to store an operating system, the Office Action fails to establish that the use of a non-volatile memory circuit and a mass storage device to store an appliance operating system and a general operating system, respectively, is well-known and therefore obvious in view of Endo. Moreover, Endo teaches that the two operating systems 116 and 117 are stored in the same memory 101 and fails to disclose or suggest that these operating systems could be stored in two different components, much less two different types of memory or storage components. *See, e.g., Endo, Figure 1.* Accordingly, the disclosure of Endo provides no motivation for the use of both a mass storage device to store one operating system and a non-volatile memory circuit to store another operating system. Accordingly, not only does the proposed combination of Endo and the Examiner’s “Official Notice” fail to disclose or suggest each and every limitation of claims 5 and 40, there is no motivation to combine the teachings of Endo and the Examiner’s “Official Notice”.

As another example, claim 15 recites the additional limitations of wherein the communications interface through which the appliance operating system controls at least one appliance (see claim 7) is a wireless interface. The Examiner asserts that the passage of Endo at col. 1, line 23 - col. 2, line 56 discloses these additional limitations. *Office Action*, p. 7. Contrary to the Examiner's assertion, neither this passage nor any other passage of Endo discloses or suggests a wireless interface in any manner, nor does this passage or any other passage of Endo disclose that an appliance operating system controls one or more appliances using a wireless interface. Accordingly, the Office Action fails to establish that the proposed combination of Endo and the Examiner's "Official Notice" discloses or suggests the additional limitations of claim 15.


In view of the foregoing, it is respectfully submitted that the obviousness rejection of claims 5, 17-27, 29-40 and 44-46 is improper at this time and withdrawal of this rejection therefore is respectfully requested.

Conclusion

The Applicant respectfully submits that the present application is in condition for allowance and an early indication of the same is courteously solicited. The Examiner is respectfully requested to contact the undersigned by telephone at the below listed telephone number in order to expedite resolution of any issues and to expedite passage of the present application to issue, if any comments, questions, or suggestions arise in connection with the present application. The Commissioner is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number 50-0441.

Respectfully submitted,

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Date


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